

United States Government

Department of Energy
Rocky Flats Project Office

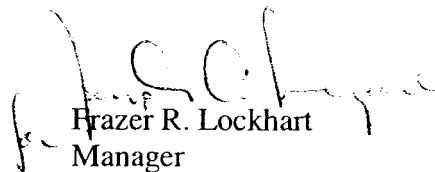
memorandum

DATE: JAN 04 2005
REPLY TO:
ATTN OF: PM:TL:04-00993
SUBJECT: Safety System Oversight Program Assessment
TO: P. M. Golan, Acting Assistant Secretary of Environmental Management, EM-1

I have reviewed the Federal Technical Capability Panel's (FTCP) requirements for Safety System Oversight (SSO) relative to the Rocky Flats Environmental Technology Site (Site). I am confident that I have in place the technical expertise to ensure a high level of operational and engineering oversight of Site safety systems as the Site completes its mission. However, I am not planning on implementing a formal SSO Technical Qualification Program at this point in the closure project, and as such, am requesting an exemption to this requirement.

The Site is rapidly moving towards closure. Both nuclear and non-nuclear buildings are being demolished. Within the next few months, all safety systems will be shut down. The Site currently has eight hazard category 1, 2 or 3 nuclear facilities and 14 safety systems. However, even these buildings, with the exception of B371, will all be demolished in the next 6-8 months. For example, Building 707 is being demolished now. The safety systems that are included in the SSO Program are the Heating, Ventilation and Air Conditioning (HVAC) and Fire Protection systems. Most of the permanent safety systems have been shut down in preparation for demolition. The Project Office has a rigorous program in place to ensure quality oversight of the temporary systems that are being used.

Based on the above, I do not intend to implement the formal SSO Technical Qualification Program at RFETS. Attached for your review is an assessment of the operational SSO Program that we implemented for the Site. I used the FTCP SSO Program Assessment Criteria and Review Approach Documents format to facilitate the review process. If you have any questions, please contact me at (303) 966-7846.


Frazer R. Lockhart
Manager

cc:
J. Arango, EM-3.2
J. Legare, PM
T. Lukow, PM
R. Bostic, PM
E. Westbrook, CPM

**Rocky Flats Project Office
Safety System Oversight Program Assessment**

PGM.1 An effective SSO Program is established by the Field Element Manager to apply engineering expertise to maintain safety system configuration and to assess system condition and effectiveness of safety management program implementation.

Although a formal SSO Qualification Program was never implemented at RFETS, the RFPO Manager has established an operational SSO Program that ensures day to day oversight of the work being performed on site and is also responsive to the unique issues associated with accelerated closure of the Site. The RFPO strategy has an SSO cadre that has the field experience and training such that they are able to adjust to changes real time, as needed, while ensuring that adequate measures are implemented and a safe working environment is maintained at all times. This strategy ensures that sufficient safety expertise is in place so that the impacts, hazards and complexity of the systems and systems related work being performed can be measured and appropriate actions taken as needed.

The Manager has a highly experienced and trained Facility Representative cadre that monitor day to day operations on site. They are the first line of defense in the SSO program. . The RFPO continues to maintain a sufficient complement of qualified Facility Representatives to not only provide routine oversight of site activities and operations, but perform SSO duties on systems in their assigned facilities as well. In addition, the Facility Representatives have immediate access to subject matter experts as needed to ensure that RFPO oversight of safety systems is rigorous. The Federal safety system subject matter experts are required to spend a significant portion of their time in the field as defined in their annual work plans. In addition, SSO expertise that is not available through the RFPO staff is supplemented by Federal expertise within the complex or by the hiring of SME's that fill a technical void in the office.

Because the Site is only a few months from shutting down and demolishing all safety systems, the Manager can not justify the commitment of resources to establishing a formal SSO Qualification Program. The operational SSO program that has been implemented at the Site meets the intent of requirement PGM.1 by ensuring that the DOE has sufficient personnel and expertise focused on SSO commensurate with the hazards associated with closure.

TQ.1 SSO Personnel and supervisors with responsibilities for SSO personnel are properly trained and qualified, or are in the process of achieving qualification.

TQ.1.1 The Rocky Flats Project Office (RFPO) currently has five personnel who are Senior Technical Safety Manager qualified. They are: the Manager; the Director of RFPO Project Management; the Project Lead for a large number of buildings to be demolished in FY05; another is assigned to Regulatory Closure; and the fifth is the FTCP agent for the RFPO.

TQ.1.2 through TQ.1.5 Although the RFPO does not have a formal SSO technical qualification program, it does have trained and highly qualified personnel performing the oversight functions. The RFPO Facility Representatives are highly qualified personnel with extensive operations and engineering experience. In addition, RFPO also has a number of Federal subject matter experts that are assigned SSO oversight functions. The RFPO also uses subject matter expertise within the complex on an as needed basis to ensure adequate oversight of the work at Rocky Flats (nuclear criticality for example). Lastly, RFPO has obtained the services of independent contract personnel to supplement SSO oversight on an as needed basis (HVAC and nuclear safety for example).

Because the Site is only a few months from shutting down and demolishing all safety systems, the operational SSO program that has been implemented at the Site meets the intent of requirement TQ.1 by ensuring that the DOE has sufficient personnel and expertise focused on SSO commensurate with the hazards associated with closure.

MG.1 SSO supervisors effectively perform their SSO program responsibilities.

The SSO supervisors at RFPO are STSM certified and as such have demonstrated a solid understanding of SSO responsibilities. They interact daily with the Facility Representatives and other SSO subject matter experts to ensure safe performance of closure related work. The Facility Representatives and other key SSO personnel are in the field everyday to ensure a safe work environment. In addition, SSO supervisors are required to spend a significant percent of their time on site and in the field as part of their individual work performance plans.

OP.1 Collectively, SSO personnel provide oversight of the Contractor's System Engineer Program

Although the Rocky Flats Project Office (and its predecessor organization the Rocky Flats Field Office) does not possess a formal, discrete SSO program, it does have (and has) trained and qualified individuals performing the requisite oversight functions. The RFPO Facility Representative program is a mature and rigorous program populated with qualified personnel possessing extensive operations and engineering experience. The RFPO continues to maintain a

sufficient complement of qualified Facility Representatives to not only provide routine oversight of site activities and operations, but perform SSO duties on systems in their assigned facilities as well.

As the Rocky Flats Environmental Technology Site (RFETS) moves to closure, the number of safety systems requiring SSO oversight is decreasing. Currently, the primary safety systems remaining are fire suppression and HVAC. All RFPO Facility Representatives have had intensive training on these systems as part of their initial qualification efforts and in continuing training. The Facility Representatives routinely interface with contractor system engineers on these and other facility systems, and do so with technical credibility. In addition, the RFPO has a certified Fire Protection Engineer (FPE) on its staff. This individual is intimately involved in all fire protection related activities occurring on the site. Any work packages involving fire protection/suppression systems are reviewed by the FPE and cognizant Facility Representative.

HVAC systems continue to be removed and replaced by temporary air movement and filtration systems. Facility Representatives monitor this work and are supported by a support service contractor who is a recognized HVAC subject matter expert (SME). Management determined that hiring contractor expertise was far more feasible than developing or hiring in-house (Federal staff) HVAC expertise. The time required to develop a training and qualification package, provide the training and testing, and determine an individual was qualified was cost and time prohibitive. The contractor SME was readily available and respected around the DOE complex. This individual has been engaged in work package reviews and technical evaluations of proposed HVAC modifications, and has provided valuable oversight of contractor HVAC engineering efforts.

The SSO performed by the RFPO meets the intent of CRAD OP.1. The amount and depth of the oversight provided is commensurate with the impacts, hazards, and complexity of the systems and system-related work being performed at the RFETS.

OP.2 SSO personnel are knowledgeable and familiar with assigned safety systems and/or programs.

At this point in the lifecycle of the Rocky Flats Environmental Technology Site (RFETS), there are only a very limited number of Safety Class and Safety Significant structures, systems, and components (SSCs) remaining. Additionally, the other SSCs that would fall in the general category of "equipment important to safety" are limited as well. As discussed for previous objectives and criteria, the primary safety systems for the remaining nuclear facilities at the RFETS consist of fire protection systems (alarm and suppression) and confinement ventilation systems.

The RFPO has a full time federal fire protection engineer (FPE) on staff who is responsible for oversight of the RFETS Fire Protection Program. This includes the oversight of both the site systems (Fires Water Supply System and Fire Alarm Systems) and the individual facility fire protection systems. The RFPO FPE has a detailed knowledge of the sitewide fire protection systems and an effective familiarity with the remaining individual facility specific fire protection systems. The RFPO FPE has demonstrated a detailed knowledge of the current configuration and status of fire protection systems across the site. Documentation indicates that he has been effectively involved in overseeing both major and relatively minor modifications to various fire protection systems. In addition, the RFPO FPE has an effective working relationship with the Facility Representatives and has immediate access to his supervisor (a Senior Technical Safety Manager) and the RFPO Manager when issues arise. Overall, the RFPO FPE has demonstrated a thorough knowledge and effective oversight of the RFETS fire protection systems and the Fire Protection Program.

The RFPO does not have an HVAC expert on the federal staff. To compensate for this, the RFPO has under contract an HVAC expert with extensive experience at the RFETS and with detailed knowledge of the remaining ventilation systems at the site. The HVAC expert provides detailed oversight and review of any major modifications to site HVAC systems. Documentation exists for his review of individual work packages associated with HVAC modifications as well as his review of "bigger picture" strategic plans developed by the contractor, which lay out the overall approach to managing the HVAC systems as D&D progresses. His weekly reports indicate frequent interaction with the contractor system engineers. As a support service contractor, he is primarily tasked with supporting the Nuclear Safety group, the Facility Representatives, and the RFPO project leads.

For the nuclear facilities undergoing D&D at the RFETS, a modified configuration management system has been established to account for the very dynamic nature of D&D and the associated necessary changes to the safety SSCs. An important aspect of this configuration management program involves the notification of RFPO prior to modifying or removing designated safety systems. This process ensures RFPO is aware of significant safety system changes and is actively involved in evaluating the adequacy and acceptability of proposed changes. This approach has enhanced the effectiveness of the safety system oversight conducted by RFPO.

Another key element of the safety system oversight for RFPO is the day to day facility oversight provided by the Facility Representatives. At RFPO, the Facility Representative qualification program and continuing training program place a heavy emphasis on safety system knowledge. This enhanced systems knowledge allows the Facility Representatives to effectively engage and challenge the

contractor's operations management team and systems engineers on issues associated with safety SSCs.

Overall, Objective OP.2 is being met by RFPO. SSO personnel have demonstrated their knowledge and familiarity with the assigned safety systems related to the work currently being performed at RFETS.